



SPoRT Data Assimilation Workshop  
Tuesday, May 5, 2009  
NSSTC Conference Room 2096

Bradley Zavodsky, UAHuntsville/SPoRT 9:00  
*Welcome and SPoRT Data Assimilation Workshop Overview*

Gary Jedlovec, NASA/SPoRT 9:05  
*Expectations for SPoRT Data Assimilation Workshop*

**Section 1: Data Assimilation for Land Surface Modeling**

Jonathan Case, ENSCO, Inc./SPoRT 9:15  
*Impacts of High-Resolution Land and Ocean Surface Initialization  
on Local Model Predictions of Convection*

Christopher Hain, UAHuntsville 9:35  
*Developing Synergistic Data Assimilation Approaches for Passive  
Microwave and Thermal Infrared Soil Moisture Retrievals*

Clay Blankenship, USRA 9:55  
*Assimilation of AMSR-E soil moisture into a coupled land surface-  
mesoscale model in the Land Information System using an ensemble  
Kalman filter*

Break 10:15-10:25

**Section 2: Data Assimilation for Air Quality/Chemical Models**

Udaysankar Nair, UAHuntsville 10:25  
*Assimilation of Satellite Observed Aerosol Optical Depth*

Eun-Su Yang, UAHuntsville 10:45  
*Improving Air Quality Forecasts Using CMAQ with Satellite-Derived  
Fire Emissions*

Lihua Wang, UAHuntsville/RAPCD 11:05  
*Application of OMI O<sub>3</sub> profiles in CMAQ*

In-House Lunch 11:25-12:45

### **Section 3: Data Assimilation for Atmospheric Models**

Kevin Doty, UAHuntsville 12:45  
*Dynamical and Thermodynamical Support of Model Cloud Fields  
Using GOES Observations*

Xuanli Li, UAHuntsville 1:05  
*Impact of Dual-Polarization Radar Data on Short-Term Forecasts of  
Two Convective Storms*

Matthew Rigney, Texas A&M University 1:25  
*Ensemble Statistics and Error Covariance in a Rapidly Intensifying  
Hurricane*

Bradley Zavodsky, UAHuntsville/SPoRT 1:45  
*Impact of AIRS Profiles on Short-Term WRF Forecasts*

Break 2:05-2:15

### **Section 4: Unique Technologies for Data Assimilation**

Xiang Li, UAHuntsville/ITSC; Bradley Zavodsky, UAHuntsville/SPoRT 2:15  
*Intelligent Data Reduction Algorithms for Real-Time Data Assimilation*

Manil Maskey, UAHuntsville/ITSC; Gregoire Berthiau, UAHuntsville/VAST;  
Bradley Zavodsky, UAHuntsville/SPoRT 2:35  
*Data Assimilation Decision Making Using Sensor Web Enablement*

### **Section 5: Future Possibilities**

All Attendees 2:55-4:00  
*Open Discussion and Future NSSTC Data Assimilation Plans*